

**REMARKS****Claim Rejections Under 35 U.S.C. § 102**

Claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by *Chang* (U.S. Patent Application No. 2002/0086548). Applicant respectfully traverses this rejection.

Claim 1 has been amended to delete zirconium oxide from the possible tunnel oxide layers. New claims 35 – 42 have been added to claim a memory device and an electronic system with a memory device comprising the tunnel oxide layers of Al<sub>2</sub>O<sub>3</sub> or HfO<sub>2</sub>.

Chang discloses a method for forming a gate dielectric in an NROM. The method includes using zirconium oxide as a gate dielectric. Chang neither teaches nor suggests the use of Hafnium or Alumina as tunnel dielectric layers, as claimed in Applicant's amended claims.

Additionally, it would not have been obvious to include the choice of Hafnium or Alumina since these materials, as is well known in the art, have different electrical characteristics from zirconium. For example, the energy band gaps and the dielectric constants for Alumina and Hafnium are different than zirconium. This might require different fabrication techniques (e.g., thicknesses) than that used for zirconium.

**CONCLUSION**

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 312-2211.

Respectfully submitted,

Date: 10/13/05

Kenneth W. Bolvin  
Kenneth W. Bolvin  
Reg. No. 34,125

Attorneys for Applicant  
Leffert Jay & Polglaze  
P.O. Box 581009  
Minneapolis, MN 55458-1009  
T 612 312-2200  
F 612 312-2250